



**US Army Corps
of Engineers**
Philadelphia District

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Geotechnical Section, CENAP-EN-DG

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100 Penn Square East
Philadelphia, PA 19107-3396, USA

Site Visit Report

Date: Monday, Nov. 5, 2001

Project: Bushkill Creek Stream Restoration Project

Location: Palmer Township near Stockerton, PA

Time on Site: 900 to 1500

Purpose of Visit: Observe Geophysical Investigation

Contractor on Site: Science Applications International
Corporation (SAIC)

Weather: sunny/cold **Temp.** 40/50 deg. F AM/PM

The Following was Noted:

SAIC personnel were on site prior to my arrival. Heather Recelli, the project manager, Shawn Eichelberger, the crew supervisor and Paul LuCot, the field support technician, were present on the site. Their newest EI equipment had to be sent back for repair, and they were using their older EI equipment to start the survey. The new equipment was being repaired and scheduled to be sent to the site tomorrow.

Heather gave me 2 copies of the Final Scope of Work, which was already sent to our office and 2 copies of the Accident Prevention Plan for the project.

The crew had completed PADOT's investigation on Friday night and they were preparing PADOT's report at this time.

Two Electrical Imaging surveys were conducted on the southern side of the Bushkill Creek today. The surveys extended from the Route 33 embankment to the area immediately adjacent to the western side of SR 2017. I took around 4 to 5 hours to complete each survey.

I performed a photo reconnaissance of the site using the digital camera. The sinkholes that I had observed several weeks before near the bridge area had distinctly enlarged and were draining a large amount of water out of the creek. Heather arranged the shutting off of the pumps in the Hercules Quarry for tomorrow in order for them to perform the EI survey in the creek bed.

Photographs



View looking southwest across the soybean field immediately north of the Bushkill Creek area investigated during this EI survey. SR 2017 is to the left in this photograph.



View looking south along SR 2017 towards the collapsed bridge.



View looking east across the northern end of bridge approach area. A sinkhole was previously observed and filled just beyond the roadway. PADOT's EI survey indicated the presence of low conductivity in this area.



View looking southwest across the major distressed area of the bridge (north end). The eastern portion of the current EI survey area is in the background in this photo. The riprap and light brown fill in the background is part of a recent sinkhole restoration area.



View of the more recent, and enlarging, sinkhole area northwest of the bridge. Photo is looking north to northwest. The greatest distress to the bridge is immediately to the right of this area.



View looking southeast from the south side of the bridge towards an area where local residents reported the early development of a new sinkhole. Stream water seems to be eddying in the area immediately behind the tree debris.



View looking east from the bridge showing the area immediately left of the area shown in the previous photograph looking downstream.

The following photos are focused on the area of the EI survey today along the southern side of the Bushkill Creek.



View looking northwest from starting point of the first EI survey point immediately west of the residence. The area behind the wood fence was the former large sinkhole area that had been remediated.



View along the first EI survey line immediately west of the area shown in the previous figure. The brown soil delineates the former remediation area.



View further west from the 2 previous photos, showing the remediation area and area investigated today by the EI survey. The Route 33 bridge is behind the trees in the central part of this photograph.



View looking southwest across the area shown in the previous photo from the other side of the creek.



View looking east across the former remediation area shown in the previous pictures.



View looking southeast across the area shown in the previous photograph. The first EI survey line extended from behind the right corner of the gray house in the background to the right of the central part of this photograph. The second line extended from behind the garage to the left to the area shown at the far right of the photograph.

The EI survey lines have to be generally straight, therefore this criss-cross pattern provided the best coverage of this area.